

# ARC-400/500/600HD



## Quick Specs



**Application:**  
Construction industry  
Metal workshops  
Agriculture  
Repair and maintenance

**PROCESS:**  
MMA(Stick)

**Input Power:** 400V, 3-Phase  
**Amperage Range:** 400HD: 20-400A  
500HD: 20-500A/600HD: 20-600A  
**Rated Out put at 40°C(104°F):**  
400HD: 400A at 36V @60% Duty Cycle  
500HD: 500A at 40V @60% Duty Cycle  
600HD: 600A at 44V @60% Duty Cycle  
**Weight:** 45KG

## For TIG and Stick Welding

### High voltage output for up-to 100M welding cables, The heavy duty gouging power source

Site welding machines normally serve a little compromise in performance. But for the ARC-400/500/600HD it was not. Based on the soft-switching inverter technology with digital control system ensures a stable arc, providing problem-free welding even for special electrodes. It's specially designed for cellulose electrodes are 100% safe for vertical-down welds and with a professional welding performance. The **ARC-400/500/600HD** offers 500amps of gouging power with 60% duty cycle. With the special designs, the gouging properties are optimized and noise levels kept very low. It can lets you open roots or faulty welds, prepare welding grooves, cut metals, pierce holes, clean casts and remove excess metal.

## Specialist Features

### Precision Arc Performance:

- **Built-in arc control** lets you get in tight without sticking the electrode. An electrode compensation circuit ensures consistent arc control performance regardless of the electrode size.
- **Hot Start Function** reliably ignites the electrode and melts perfectly to ensure the best quality even at the start of the seam.
- **Arc Force** makes it easier to weld large-drop melting electrode types at low current strengths with a short arc in particular.
- **Thermal overload protection** light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.
- Expert of vertical-down welding with cellulose electrodes.
- **Special designed for carbon arc gouging.**
- **Fast, precise, clean arc ignition and arc ending.**
- **10 channels memory capacity**



### Outstanding Quality:

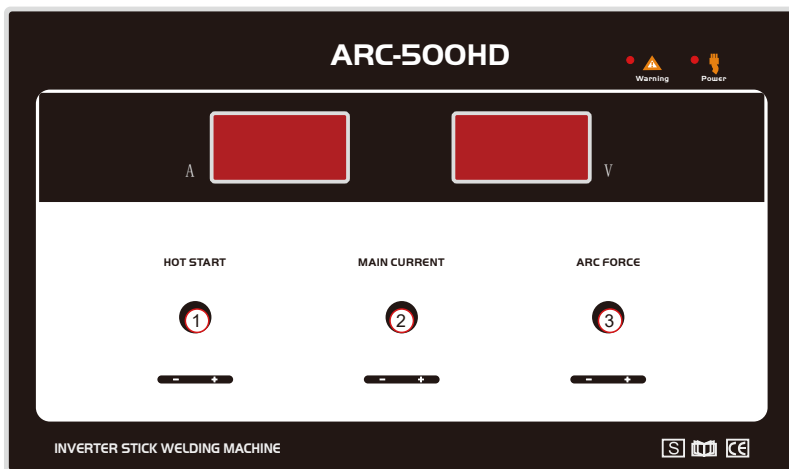
- Newly designed using the latest power electronic technology for improved reliability.
- CE Certified.
- One-Year Warranty on parts.



## Technical specifications

Item No	ARC-400HD	ARC-500HD	ARC-600HD
Rated Input Voltage	3PH ~ 400V ±15%	3PH ~ 400V ±15%	3PH ~ 400V ±15%
Max. Load Power Capacity	19.93KVA	27.68KVA	39.41KVA
Rated Duty Cycle(40 C )	60%	400A/36V	500A/40V
	100%	315A/32.6V	400A/36V
Welding Current/Voltage Range	20A/20.8V~400A/36V	20A/20.8V~500A/40V	20A/20.8V~600A/44V
Open Circuit Voltage	70V~80V	70V~80V	70V~80V
Power Factor	0.85	0.85	0.85
Efficiency	85%	85%	85%
MMA	Arc Force	1%~100%	1%~100%
	Hot Start Time	0.1S~2S	0.1S~2S
	Hot Start Current	1%~100%	1%~100%
Dimension	680x310x650mm	680x310x650mm	680x310x650mm
Weight	45KG	45KG	45KG

## General View of Control Panel



### Control Panel Parameter Values

#### 1. Hotstart current rotary dial

Increased ignition current during the set hotstart period to optimise the arc ignition. Setting from 20 A to 200 A.

#### 2. Welding current setting rotary dial

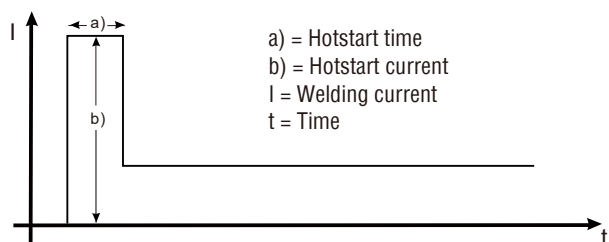
Infinite setting of the welding current across the whole power range.

#### 3. Arcforce rotary dial

To adjust the welding parameters to the electrode type used. Infinite setting from rutile (soft arc) to cellulose (hard arc) electrode types.

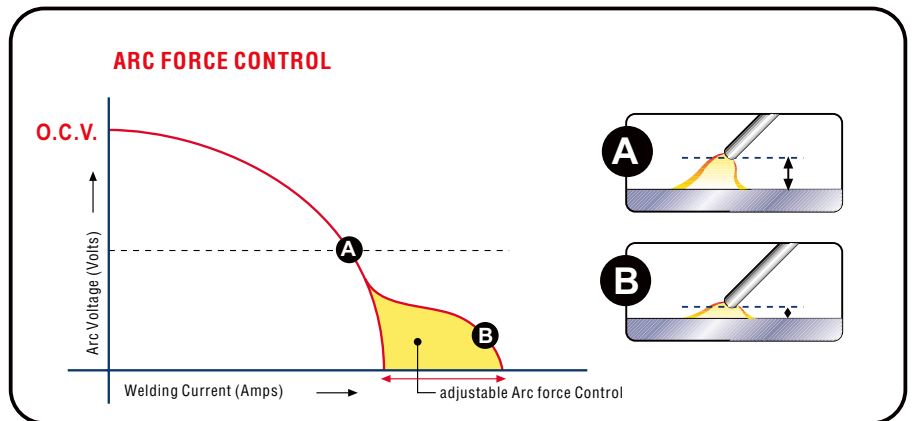
## Hot Start

**Hot start** function reliably ignites the electrode and melts perfectly to ensure the best quality even at the start of the seam. This solution makes lack of fusion and cold welds a thing of the past and significantly reduces weld reinforcement. Adjust the hot start current here and the time here.



## Arcforce correction (welding characteristics)

During the welding process, arcforce prevents the electrode sticking in the weld pool with increases in current. This makes it easier to weld large-drop melting electrode types at low current strengths with a short arc in particular.



## Accessories

### For Standard accessories



Electrode holder with cable 2M  
Earth clamp with cable 2M



Hand helmet  
Brush/hanner

### For Optional accessories



Air Carbon Gouging Torch